

FIG. 1 PRIOR ART

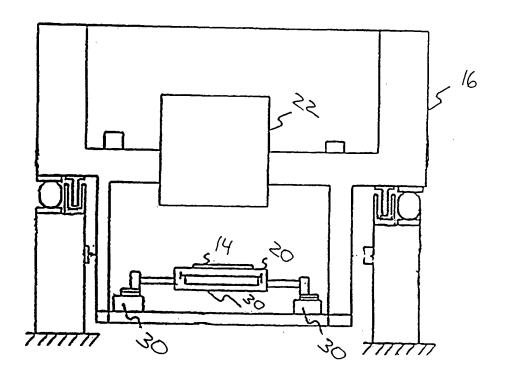


FIG. 2 PRIOR ART



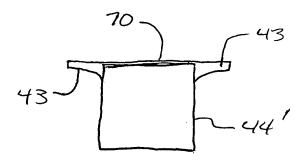
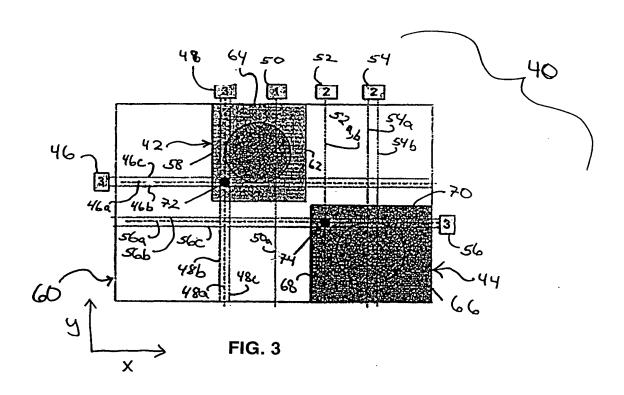
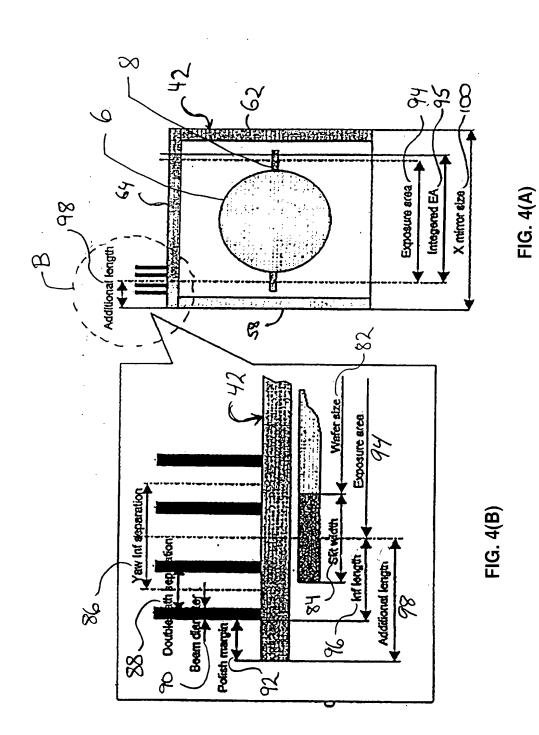


FIG. 3(A)





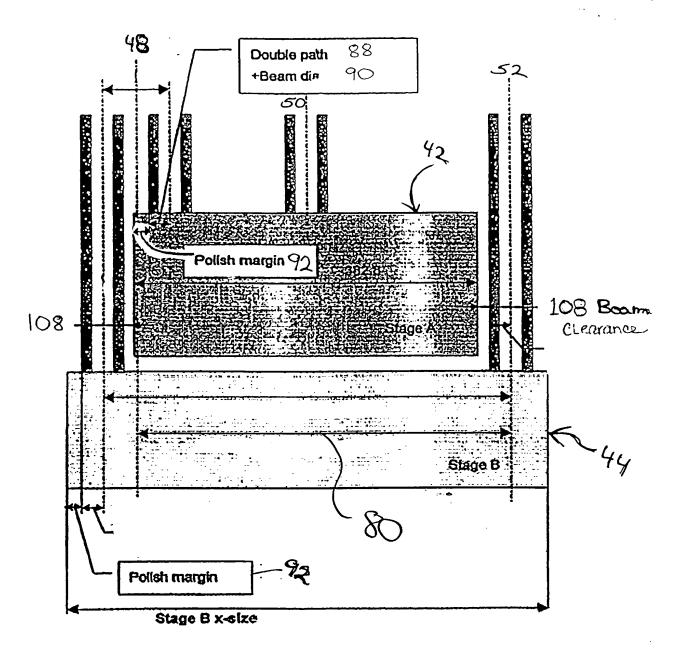


FIG. 5

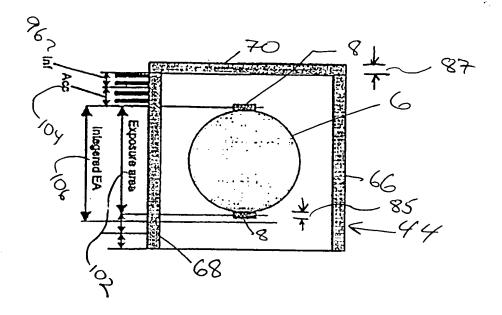


FIG. 6

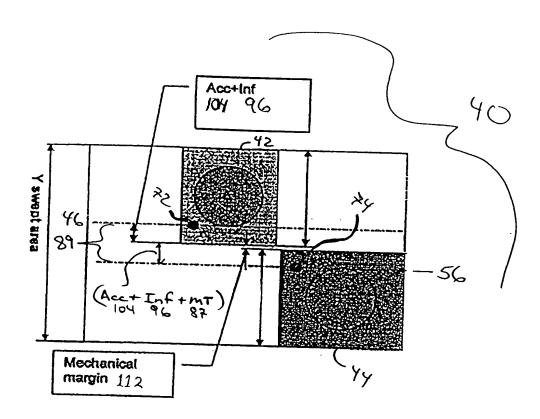
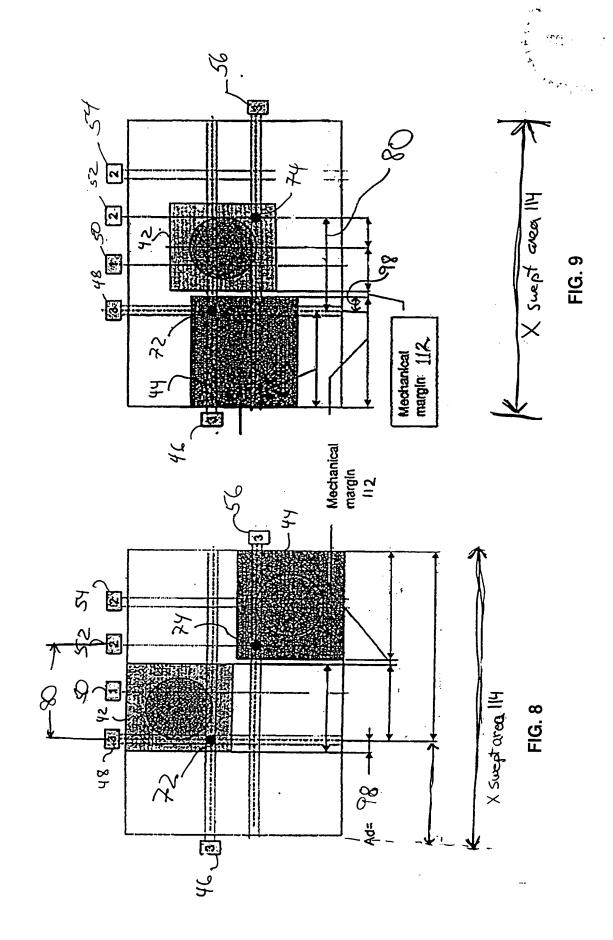
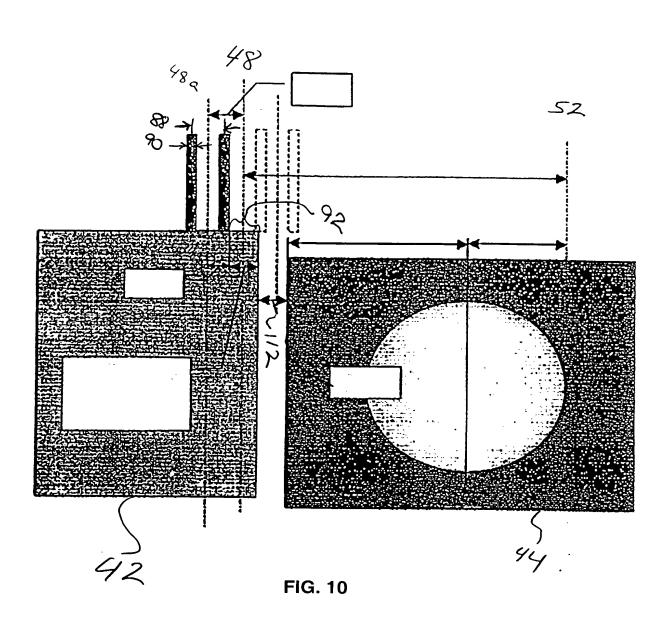
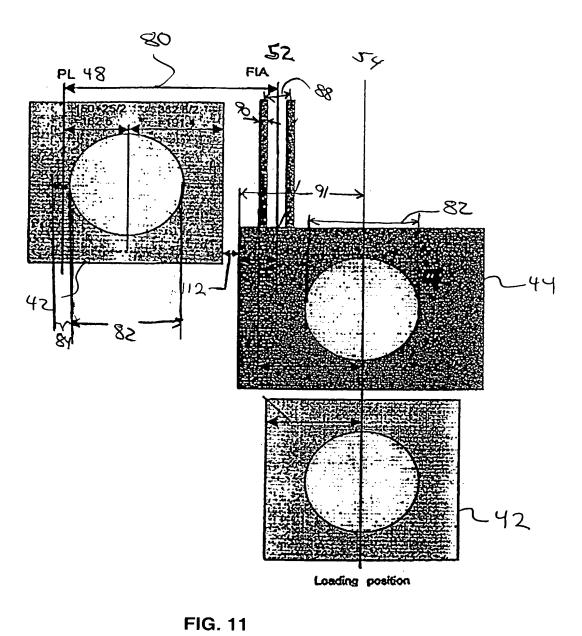


FIG. 7







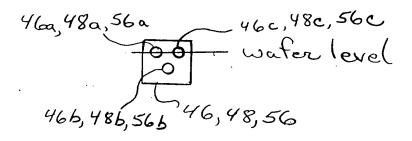


FIG. 12(A)



FIG. 12(B)



FIG. 12(C)



FIG. 12(D)

Wafer stage 42: Perform loading. Monitor X position by 56a changing to 56, Y position by 54 and Yaw by 54.	
Wafer stage 44: Stopped to begin exposure sequence if loaded values a wafer. Monitor X position by 46, Y position by 48, and Yaw by 2 See Fig. 14(a)	with :
Wafer stage 42: Start EGA. Change to monitor Y position by 52 a Yaw by 56. Halt movement when necessary to avoid disturbing stage 44. Wafer stage 44: Continue exposing if loaded. See Fig. 14(b)	and 2
Ţ	
Wafer stage 42: Continue EGA. Change to monitor Y position by Wafer stage 44: Stopped at the end of the exposure sequence. See Fig. 14(c)	50.
Wafer stage 42: End EGA. Begin switching in the Y direction. Change to monitor Yaw by 52 and 50. Wafer stage 44: Switch in the Y direction. See Fig. 14(d)	20
Wafer stage 42: Switch in the Y direction. Change to monitor X position by 56a. Wafer stage 44: Wait to switch in the Y direction. Change to moni Y position by 56c when 56c becomes available. See Fig. 14(e)	tor 20
Wafer stage 42: Wait in the Y direction. Change to monitor X position by 46 and Yaw by 46 when 46 becomes available. Wafer stage 44: Switch in the Y direction. See Fig. 14(f)	21
Wafer stage 42: Switch in the Y direction. Wafer stage 44: Switch in the Y direction. Change to monitor X position by 56 and Yaw by 56. See Fig. 14(g)	21

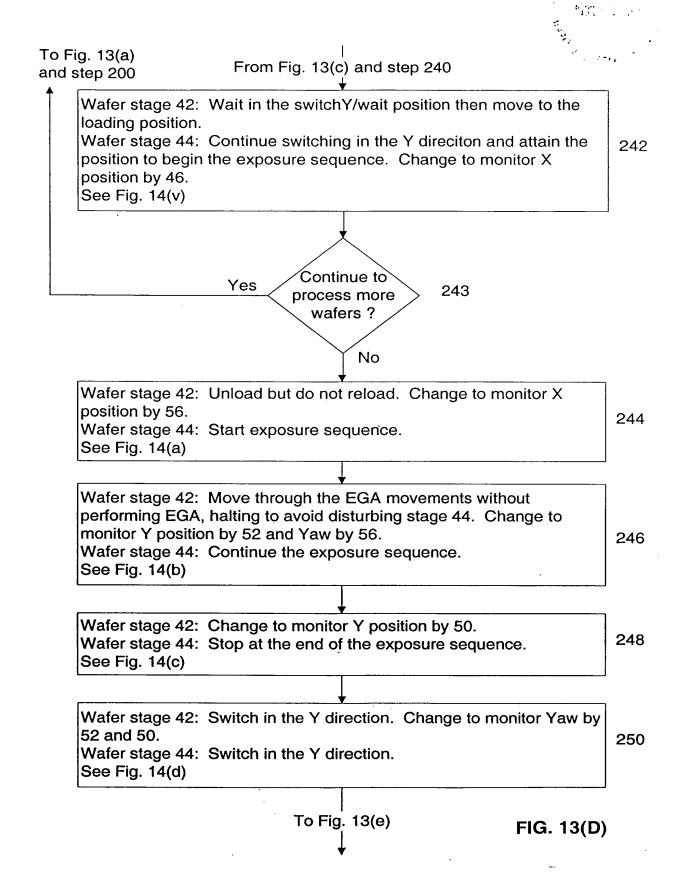
To Fig. 13(a) and step 200

Wafer stage 42: Switch in the X direction. Change to monitor Y position by 48c. Wafer stage 44: Wait for stage 42 to finish moving. Change to 214 monitor Y position by 48a. See Fig. 14(h) Wafer stage 42: Wait for stage 44 to finish moving. Wafer stage 44: Switch in the X direction. Change to monitor Y 216 position by 52. See Fig. 14(i) Wafer stage 42: Start exposure sequence. Change to monitor Y position by 48. Wafer stage 44: Switch in the X direction. Change to monitor Y 218 position by 54. See Fig. 14(j) Wafer stage 42: Start exposure sequence. Wafer stage 44: Load the wafer. 220 See Fig. 3 Wafer stage 42: Continue exposure sequence. Wafer stage 44: Continue loading. Change to monitor Y position by 222 52. See Fig. 14(I) Wafer stage 42: Continue exposure sequence. Wafer stage 44: Perform EGA. 224 See Fig. 14(m) Wafer stage 42: End exposure sequence. Wafer stage 44: Continue EGA. 226 See Fig. 14(n) Wafer stage 42: Stop in the safety position and wait for stage 44 to finish EGA. 228 Wafer stage 44: End EGA. See Fig. 14(o)

To Fig. 13(c)

FIG. 13(B)

Fig. 13(a) d step 200 From Fig. 13(b) and step 228	n a c
Wafer stage 42: Stop in the safety postiion. Wafer stage 44: Switch in the X direction. See Fig. 14(p)	230
	_
Wafer stage 42: Switch in the X direction. Change to monitor Y position by 50. Wafer stage 44: Wait for 48a to become available to control Y position. Resume switching in the X direction. See Fig. 14(q)	232
Wafer stage 42: Continue switching in the X direction. Wafer stage 44: Wait in the switch X/wait position. Change to monitor Y postiion by 48a. See Fig. 14(r)	234
	_
Wafer stage 42: Continue switching in the X direction. Change to monitor Y position by 52. Wafer stage 44: Wait in the switch X/wait position. Change to monitor Y position by 48 and Yaw by 48. See Fig. 14(s)	236
	_
Wafer stage 42: Continue switching in the X direction. Change to monitor Y postion by 54 and Yaw by 54. Wafer stage 44: Wait in the switch X/wait position. See Fig. 14(t)	238
+	 -
Wafer stage 42: Switch in the Y direction. Change to monitor X position by 56a. Wafer stage 44: Switch in the Y direction. Change to monitor X position by 56c. See Fig. 14(u)	240
To Fig. 13(d) FIG. 13(C)	J



From Fig. 13(d)

Wafer stage 42: Switch in the Y direction. Change to monitor X position by 56a. Wafer stage 44: Pause and wait for 56c to become available to 252 control X position. See Fig. 14(e) Wafer stage 42: Pause and wait for 46 to become available to control X position. 254 Wafer stage 44: Switch in the Y direction. See Fig. 14(f) Wafer stage 42: Switch in the Y direction. Wafer stage 44: Switch in the Y direction. Change to monitor X 256 position by 56 and Yaw by 56. See Fig. 14(g) Wafer stage 42: Switch in the X direction. Change to monitor Y position by 48c. 258 Wafer stage 44: Pause and wait for stage 42 to stop moving. Change to monitor Y position by 48b. See Fig. 14(h) Wafer stage 42: Pause switching in the X direction and wait for stage 44 to stop moving. 260 Wafer stage 44: Switch in the X direction. Change to monitor Y position by 52. See Fig. 14(i) Wafer stage 42: Change to monitor Y position by 48. Wafer stage 44: Remofe exposed wafer. Change to monitor Y 262 position by 54. See Fig. 14(j)

End Process

FIG. 13(E)

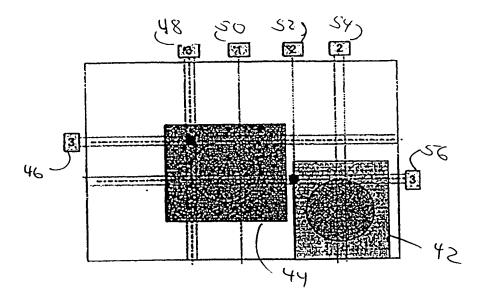


FIG. 14(A)

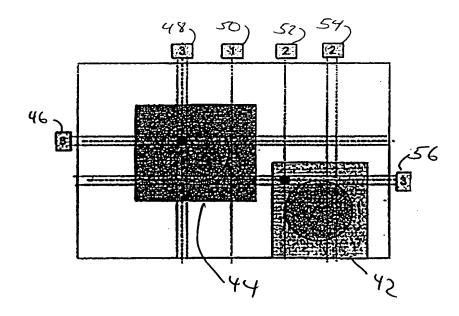


FIG. 14(B)

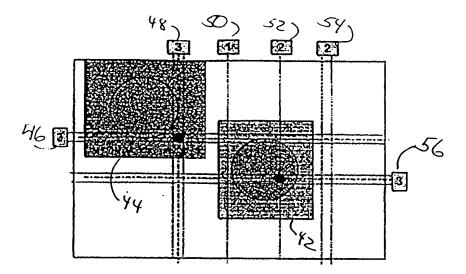


FIG. 14(C)

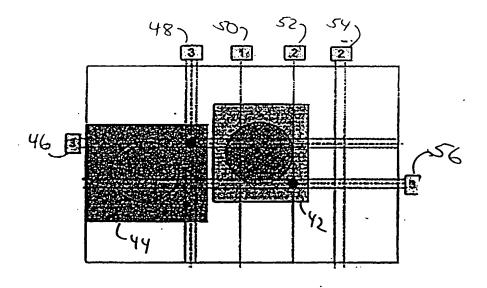


FIG. 14(D)

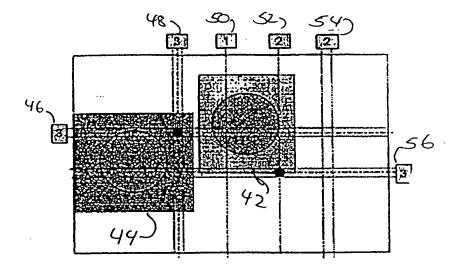


FIG. 14(E)

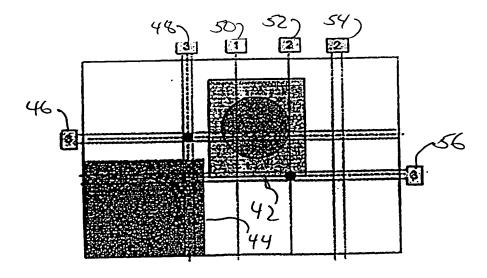


FIG. 14(F)

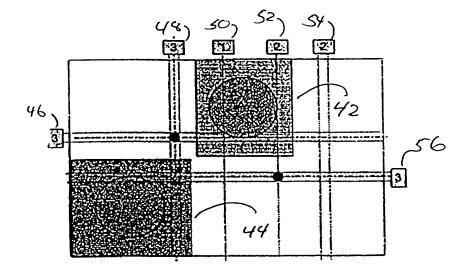


FIG. 14(G)

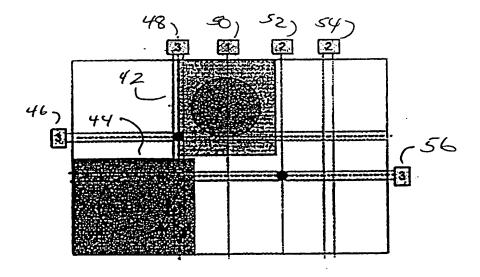


FIG. 14(H)

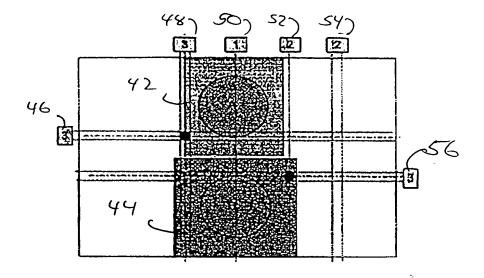


FIG. 14(I)

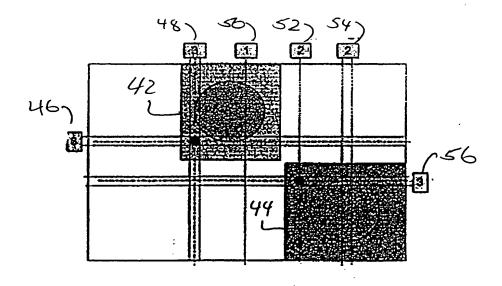
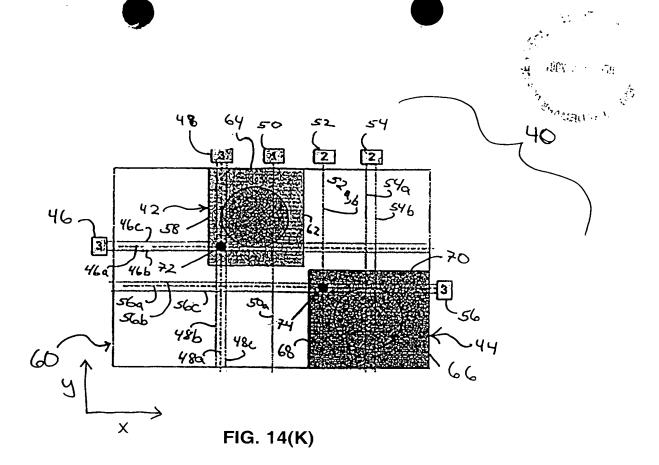


FIG. 14(J)



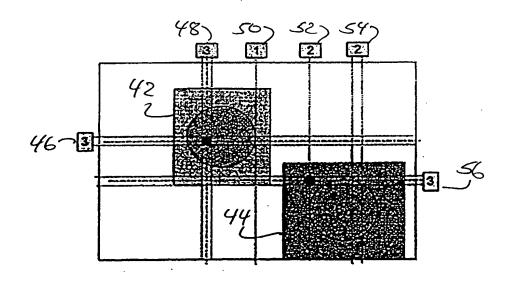


FIG. 14(L)

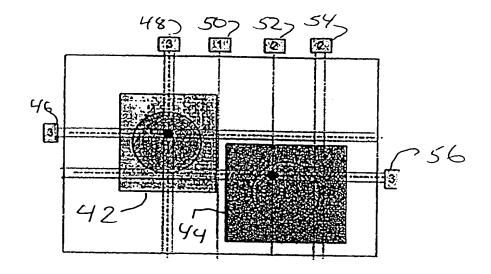


FIG. 14(M)

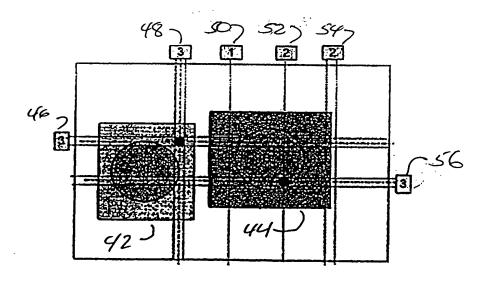


FIG. 14(N)

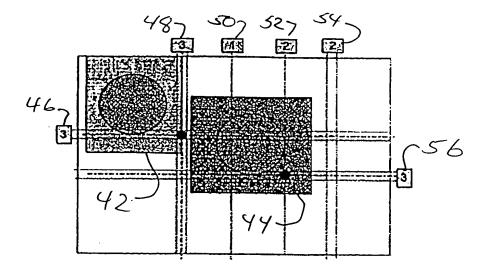


FIG. 14(0)

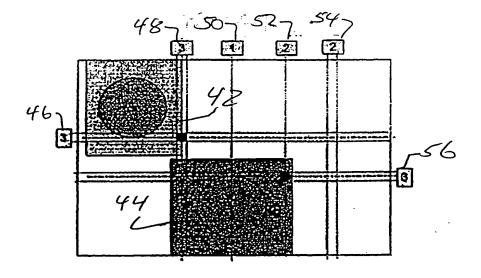


FIG. 14(P)

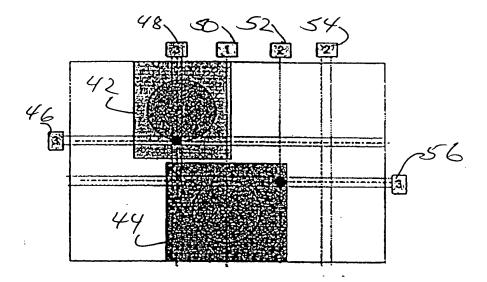


FIG. 14(Q)

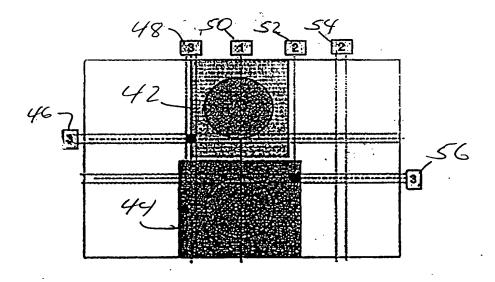


FIG. 14(R)

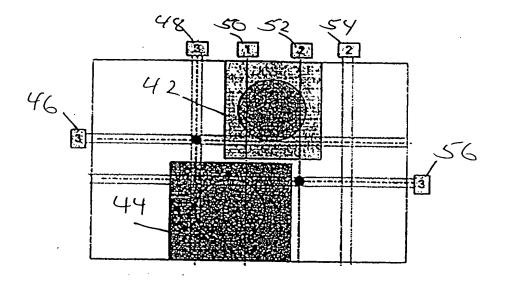


FIG. 14(S)

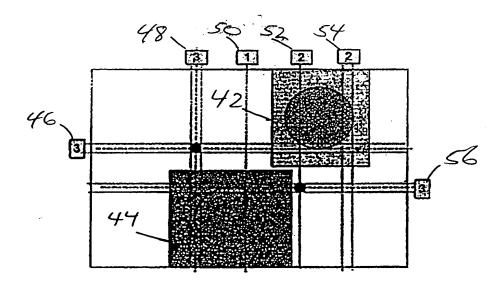


FIG. 14(T)

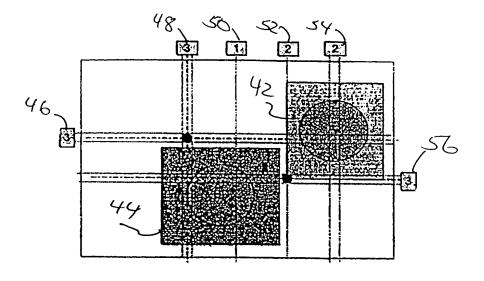


FIG. 14(U)

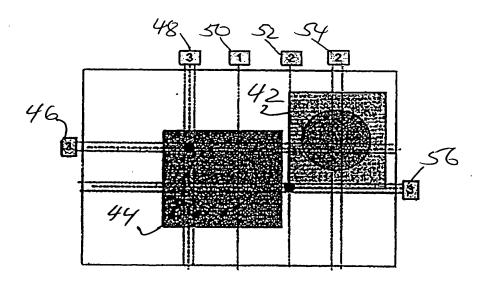


FIG. 14(V)